


# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>P0697</b>	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. <b>PCT/GB03/00577</b>	International filing date ( <i>day/month/year</i> ) <b>12.02.2003</b>	Priority date ( <i>day/month/year</i> ) <b>19.02.2002</b>
International Patent Classification (IPC) or both national classification and IPC <b>H05B3/74</b>		
Applicant <b>CERAMASPEED LIMITED</b>		
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of    sheets.</p>		
<p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> <li>I    <input checked="" type="checkbox"/> Basis of the opinion</li> <li>II   <input type="checkbox"/> Priority</li> <li>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</li> <li>IV <input type="checkbox"/> Lack of unity of invention</li> <li>V   <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</li> <li>VI <input type="checkbox"/> Certain documents cited</li> <li>VII <input type="checkbox"/> Certain defects in the international application</li> <li>VIII <input type="checkbox"/> Certain observations on the international application</li> </ul>		
Date of submission of the demand  <b>05.09.2003</b>	Date of completion of this report  <b>25.11.2003</b>	
Name and mailing address of the international preliminary examining authority:   European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer  <b>Taccoen, J-F</b>  Telephone No. +31 70 340-3405	



**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/GB03/00577

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, Pages**

1-11 as originally filed

**Claims, Numbers**

1-17 as originally filed

**Drawings, Sheets**

1/2-2/2 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).  
☐ the language of publication of the international application (under Rule 48.3(b)).  
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority in written form.  
☐ furnished subsequently to this Authority in computer readable form.  
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:  
☐ the claims, Nos.:  
☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	1-17
	No: Claims	
Inventive step (IS)	Yes: Claims	1-17
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-17
	No: Claims	

2. Citations and explanations

**see separate sheet**

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EXAMINATION REPORT - SEPARATE SHEET**

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**Re Item V**

**Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Reference is made to the following document/s/:

D1: EP-A-0 892 584 (CERAMASPEED LTD) 20 January 1999 (1999-01-20)

D2: US-A-4 511 789 (WILDE EUGEN ET AL) 16 April 1985 (1985-04-16)

2. The present application appears to meet the requirements of Article 33(2) PCT, because the subject-matter of claim 1 appears to be new.

3. The present application appears to meet the requirements of Article 33(3) PCT, because the subject-matter of claim 1 appears to involve an inventive step.

4. The invention describes an electric heater assembly for a smooth top cooking appliance, the assembly comprising a first heating zone, and a second heating zone.

The document D1 is regarded as being the closest prior art to the subject-matter of claim 1.

The subject-matter of claim 1 is distinguished from D1 in that, claim 1 further

comprises:

the assembly is adapted whereby the first heating zone is operable alone with the first cyclic energy controller controlling power of the at least one first heating element at selected settings between a maximum duty cycle and a minimum duty cycle, and wherein the assembly is further adapted whereby the first and the at least one second heating zones are operable together and such that in a selected full power operating condition of the assembly the second cyclic energy controller energises the at least one second heating element at substantially maximum duty cycle to provide a substantially maximum power in the at least one second heating zone, and the first cyclic energy controller energises the at least one first heating element at less than maximum duty cycle to provide less than maximum power in the first heating zone.

5. Claim 1 appears to be novel over D1 in that, there is inter alia no disclosure of selective two zones heating controlling such as described above.

6. With respect to inventive step, the above mentioned features result in a satisfactory heat distribution in the heater assembly when is taken into account the two heating zones.

The objective technical problem could be therefore to provide a more effective heating of food using two heating zones, the distribution of heat between the two zones being satisfactory.

Claim 1 appears to involve an inventive step, because claim 1 of the present application states that, when the first and second heating zones are energised together **at full power setting** the power of the first heating element in the first heating zone is **less** than the power of the second heating element in the second heating zone.

The difference between document D1 and the application being when the first and second heating zones are energised together, that **at the full power setting** of the first heating element in the first heating zone is **not less** than the power of the second heating element in the second heating zone.

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The teaching of document D1 is therefore opposite to the requirement of claim 1 of the present application and the two are irreconcilable.

The skilled person in possession of document D1 is clearly taught against changing the relative power outputs in the manner required by claim 1 of the present application.

Document D2 describes an initial power boost when switching from the first heating zone alone to the first and second heating zones being energised together. Further, document D2 accomplishes such a power output using only a single cyclic energy regulator, but using a complex thermal cut-out device.

Document D2 is also solving a different problem to the subject-matter of claim 1 of the present application. Document D2 is seeking to provide an initial temperature boost, while claim 1 requires that the power to the first heating element is reduced when energising both the first and second heating zones at full power. These two objectives are irreconcilable.

Further a combination of the subject-matter of document D1 and the subject-matter of document D2 does not result in subject-matter falling within the scope of claim 1. Neither prior art document teaches that the power output of the first heating zone should be reduced when switching at full power level from a situation in which only the first heating zone is energised to a situation in which both the first and second heating zones are energised.

7. The depending claims 2-17 related to claim 1 appear to fulfill the requirements of Article 33(2), 33(3) PCT.

8. The industrial applicability of the subject-matter of claims 1-17 appears to be evident. Consequently the claims 1-17 fulfill the requirements of Article 33(4) PCT.